

Remarks

Claims 5, 9, 14, 17 and 19 are amended and claims 20 to 25 are added. Claims 1 to 25 are pending in this application of which claims 1, 5, 9, 17, 19, 20 and 21 are in independent form.

Applicants appreciatively acknowledge that claims 5 to 7, 9, 10 and 17 to 19 contain allowable subject matter. Accordingly, claims 5, 9, 17 and 19 are amended to incorporate therein all the features and limitations of the claims from which they had depended. Claims 6 and 7 are dependent from claim 5 and claims 10 and 18 are dependent from claims 9 and 17, respectively. Accordingly, claims 5 to 7, 9, 10 and 17 to 19 should now be in condition for allowance.

Claim 1 was rejected under 35 USC 102(b) as being anticipated by Mizoguchi et al. The following will show that claim 1 patentably distinguishes the invention over this reference.

The adjusting device of Mizoguchi et al permits a movement of the optical end elements only in the x-direction but not in the y-direction. In contrast to Mizoguchi et al, applicants' claim 1 includes the feature and limitation of:

"an adjusting device attached to said frame for variably changing the position of said optical end element substantially in a plane parallel to said viewing field of said user." (emphasis added)

As seen above, the applicants' optical end element must be movable in two direction in order that it be movable in a plane. This is not possible in Mizoguchi et al because only a linear movement along a straight line is possible with the apparatus of

this reference. This can be especially seen in FIG. 4 of Mizoguchi et al wherein the ocular end element 47 is shown movable only back and forth by the double arrow. Accordingly, Mizoguchi et al cannot achieve the applicants' object of providing a head-mounted optical visualization system which is adaptable with respect to the anatomical and optical characteristics of the user as well as adaptable with respect to an instantaneous task-required primary viewing direction of the user as noted at the top of page 2, of the applicants' disclosure. This is so, because Mizoguchi et al is greatly limited as the movement is restricted to be along a single line as opposed to a plane as set forth above in applicants' claim 1.

The applicants have reviewed Mizoguchi et al and have found no suggestion from which our person of ordinary skill could hit upon the idea of moving the optical end element in a plane as required by applicants' claim 1. Accordingly, it is not seen how Mizoguchi et al could anticipate or even render obvious the applicants' invention so that claim 1 should now patentably distinguish the application over Mizoguchi et al and be allowable.

With respect to applicants' claim 4, it is noted that the applicants' deflecting device is adaptable with reference to the desired magnitude of the virtual image provided ahead of the eye of the user by the optical deflecting device.

In Mizoguchi et al, an increase in magnitude is achieved in that the LCD display panel is variable in its position. In this connection, please see FIGS. 5 and 10 of this reference as well as column 8, starting at line 54, where it is noted:

"...According to the vertical movement of the LCD holder 43, a spacing between the LCD 45, the reflector plate 48 and the ocular lens 47 is changed for allowing a user to focus an image present on the LCD according to preference."

Thus, and in contrast to the applicants' invention, the optical deflecting device in Mizoguchi et al is fixedly mounted with its reflector plate 48. This can be seen also in FIG. 5 of this reference where the lower edge of the reflector plate 48 is shown extending below a projection of the frame 41. A lifting of the mirror is prevented thereby. In addition, even if the mirror 48 could be lifted, a lifting thereof in FIG. 5 would lead to the situation that the viewer A would see the interior workings of visual unit 40 where the removed reflector plate can no longer deflect the view of the viewer.

In contrast to Mizoguchi et al, the mirror of the optical deflecting device of the applicants' invention is adaptable which makes greater values possible with respect to adjusting with a view to a desired magnitude.

Claim 11 is dependent from claim 1 and discloses that the optical deflecting device includes an optical end element and an optical lens system. The optical lens system is shown in FIG. 1 wherein its elements are identified by reference numerals (126, 126'; 128, 128'). Here it can be seen that the optical end element is not the same as the optical lens system. Stated otherwise, the optical lens system is an additional feature.

Mizoguchi et al discloses an optical end element but not a supplementing optical lens system.

Claim 22 is added to recite that the optical lens system

lies outside of the viewing field of the user. The antecedent basis for this claim can be found at the bottom of page 6 of the applicants' disclosure.

Claim 23 is added to emphasize that both the deflecting element and the lens system are built into the closed housing outside of the viewing field of the user.

Claim 14 is amended to recite only that the optical deflecting device is releasably attached to the frame. This is not the situation in Mizoguchi et al so that this reference cannot anticipate applicants' claim 14 as suggested in the action.

Claim 24 is added to recite that the optical deflecting device is tiltably attached to the frame. Also, claim 25 is added to recite that the optical deflecting device is tiltably attached to the frame so as to be easily displaceable out of the viewing field of the user.

The dependent claims 2 to 4, 8, 11 to 16 and 22 to 25 are even farther away from Mizoguchi et al than claim 1 so that they too should now be allowable.

Claim 12 was rejected under 35 USC 103(a) as being unpatentable over Mizoguchi et al in view of Rallison et al. Applicants will now show that claim 12 also patentably distinguishes their invention over this combination of references.

Rallison et al discloses a tracker for analyzing head movements and this tracker is held at the back of the head. What is special with respect to the solution disclosed in this reference is, however, that the viewing direction and viewing

depth of the user are tracked. This can take place also for a head at standstill. The detecting features in the applicants' invention are configured to be far more finer, that is, the smallest eye movements and pupil changes are detected and this is not disclosed in Rallison et al. Accordingly, it is not possible for our artisan to combine Rallison et al with Mizoguchi et al to arrive at the applicants' invention by exercising only ordinary skill.

Applicants have shown that claim 1 is not anticipated by Mizoguchi et al and that this claim patentably distinguishes the invention thereover. The remaining claims 2 to 4, 8, 11 to 16 and 22 to 25 are all dependent from claim 1. Accordingly, these claims too should now be allowable.

Reconsideration of the application is earnestly solicited.

Respectfully submitted,



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PATENT APPLICATION FEE DETERMINATION RECORD

Application or Docket Number

10/750,958

CLAIMS AS FILED - PART I					SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
(Column 1)		(Column 2)			(Column 3)		(Column 4)		(Column 5)	
FOR	NUMBER FILED	NUMBER EXTRA			RATE	FEE			RATE	FEE
BASIC FEE (37 CFR 1.16(a))						\$				\$ 770
TOTAL CLAIMS (37 CFR 1.16(c))	19	minus 20 =	* 0		x \$	=			x \$	=
INDEPENDENT CLAIMS (37 CFR 1.16(b))	1	minus 3 =	* 0		x	=			x	=
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(d))					+	=			+	=
					TOTAL				TOTAL	770
* If the difference in column 1 is less than zero, enter "0" in column 2										
CLAIMS AS AMENDED - PART II					SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
(Column 1)		(Column 2)		(Column 3)	(Column 4)		(Column 5)		(Column 6)	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE			RATE	ADDITIONAL FEE
Total (37 CFR 1.16(c))	* 25	Minus	** 20	= 5	x \$	=			x \$ 50	= 250
Independent (37 CFR 1.16(b))	* 7	Minus	*** 3	= 4	x	=			x 200	= 800
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))					+	=			+	=
					TOTAL				TOTAL	1,050
ADDIT. FEE										
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE			RATE	ADDITIONAL FEE
Total (37 CFR 1.16(c))	*	Minus	**	=	x \$	=			x \$	=
Independent (37 CFR 1.16(b))	*	Minus	***	=	x	=			x	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))					+	=			+	=
					TOTAL				TOTAL	
ADDIT. FEE										
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE			RATE	ADDITIONAL FEE
Total (37 CFR 1.16(c))	*	Minus	**	=	x \$	=			x \$	=
Independent (37 CFR 1.16(b))	*	Minus	***	=	x	=			x	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))					+	=			+	=
					TOTAL				TOTAL	
ADDIT. FEE										

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

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